



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Applicant(s):** Borrelli et al.

**Serial No.:** 09/954,500

**Filed:** September 17, 2001

**For:** Direct Writing Of Optical Devices In  
Silica-Based Glass Using Femtosecond  
Pulse Lasers

**COMBINED  
CERTIFICATE UNDER  
37 C.F.R. § 3.73(b)  
and**

**POWER OF ATTORNEY**

Assistant Commissioner for Patents  
Washington, DC 20231

**CERTIFICATE UNDER 37 C.F.R. § 3.73(b)**

**CORNING INCORPORATED**, a New York corporation, certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of an assignment from the inventor(s) of the patent application identified above. A true copy of the unrecorded Assignment is attached hereto.

The undersigned has reviewed the above referenced assignment of the patent application identified above and, to the best of the undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



### POWER OF ATTORNEY BY ASSIGNEE

CORNING INCORPORATED, the assignee of the full and exclusive right, title and interest in and to the accompanying application for United States Letters Patent entitled **DIRECT WRITING OF OPTICAL DEVICES IN SILICA-BASED GLASS USING FEMTOSECOND PULSE LASERS** and executed by Nicholas F. Borrelli, Charlene M. Smith on October 25, 2001 and October 30, 2001, respectively, appoints the practitioners associated with the Customer Number provided below (i.e., the practitioners associated with the Patent Department, Corning Incorporated) to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith. Please direct all correspondence to Thomas Ryan at the address associated with that Customer Number.

**Customer Number: 29988**

CORNING INCORPORATED

Date: November 1, 2001

By

Mark W. Lauroesch  
Assistant Secretary

COPY

ASSIGNMENT

FOR VALUE RECEIVED, I, as a below named inventor, hereby sell, assign and transfer unto Corning Incorporated, a corporation organized and existing under the laws of the State of New York, having its principal place of business at Corning, New York, (hereinafter CORNING), as assignee, and unto its successors, assigns and legal representatives, the entire right, title and interest, for all countries, in and to certain inventions relating to a **Direct Writing of Optical Devices In Silica-Based Glass Using Femtosecond Pulse Lasers**, such inventions being generally described in an application for Letters Patent of the United States executed on

DATE October 25, 2001

DATE October 30, 2001

DATE October 25, 2001

DATE October 30, 2001

and in any future patent applications claiming the benefit of the filing date of that application, and all the rights and privileges under any and all Letters Patents that may be granted therefore.

I request that any and all patents for said inventions be issued to CORNING, its successors, assigns and legal representatives, or to such nominees as CORNING may designate.

I agree that, when requested, I will, without charge to CORNING and at CORNING's expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in CORNING, its successors, assigns and legal representatives or nominees.

I authorize and empower CORNING, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for said Convention or entered as a supplement to, and to invoke and claim such right of priority without further written or oral authorization.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of CORNING, or its successors, assigns and legal representatives or nominees to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it or entered as a supplement to it.

I covenant with CORNING, its successors, assigns and legal representatives or nominees, that the rights and property herein conveyed are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Signed at Corning, NY, this

10/25/01  
Date

Nicholas F. Borrelli  
Nicholas F. Borrelli

10/30/01  
Date

Joseph F. Schroeder  
Joseph F. Schroeder

10/25/01  
Date

Charlene M. Smith  
Charlene M. Smith

10-30-01  
Date

Alexander Streltsov  
Alexander Streltsov

State of New York)

: ss.

County of Steuben)

On the 25<sup>th</sup> day of October 2001, before me personally came Nicholas F. Borrelli known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.

Colleen E. Doherty  
Notary Public

State of New York)

: ss.

County of Steuben)

On the 30<sup>th</sup> day of October 2001, before me personally came Joseph F. Schroeder known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.

Colleen E. Doherty  
Notary Public

COLLEEN E. DOHERTY

Notary Public, State of New York

Qualified in Steuben County No. 01DO6040673

My Commission Expires April 24, 2002

State of New York)

: ss.

County of Steuben)

On the 25<sup>th</sup> day of October 2001, before me personally came Charlene M. Smith known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.

Colleen E. Doherty  
Notary Public

COLLEEN E. DOHERTY

Notary Public, State of New York

Qualified in Steuben County No. 01DO6040673

My Commission Expires April 24, 2002

State of New York)

: ss.

County of Steuben)

On the 30<sup>th</sup> day of October 2001, before me personally came Alexander Streltsov known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.

Colleen E. Doherty  
Notary Public

COLLEEN E. DOHERTY

Notary Public, State of New York

Qualified in Steuben County No. 01DO6040673

My Commission Expires April 24, 2002

COLLEEN E. DOHERTY  
Notary Public, State of New York  
Qualified in Steuben County No. 01DO6040673  
My Commission Expires April 24, 2002

## ASSIGNMENT

For good and valuable consideration, the **ASSIGNOR(S)**:

Alexander Streltsov, 137 Field Street, Apt. #2, Corning, New York, 14830;

Nicholas F. Borrelli, 935 West Water Street, Elmira, New York, 14905;

Charlene M. Smith, 222 Watauge Avenue, Corning, New York, 14830; and

Joseph F. Schroeder III, 8769 Stevens Road, Lindley, New York, 14858;

hereby assign(s) to the **ASSIGNEE**:

Corning Incorporated, One River Front Plaza, Corning, New York, 14831, a New York corporation,

the full and exclusive right, title, and interest

to the invention disclosed in United States Patent Application entitled

### **DIRECT WRITING OF OPTICAL DEVICES IN SILICA-BASED GLASS USING FEMTOSECOND PULSE LASERS**

and to all Letters Patent or similar legal protections throughout the world resulting from the application or any substitute or related applications disclosing common subject matter.

**ASSIGNOR(S)** guarantee(s) that no assignment, license, or encumbrance has been or will be made that would conflict with this Assignment.

**ASSIGNOR(S)** agree(s) to cooperate fully in obtaining and enforcing the Letters Patent or similar protections, including communicating any relevant information, signing any lawful and relevant documents, and, at the request and expense of the **ASSIGNEE**, testifying in any legal proceedings.

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**ASSIGNOR(S)** hereby authorize and request the attorneys/agents of the  
**ASSIGNEE** to indicate here the execution date(s) of this patent application on  
\_\_\_\_\_ to comply with  
37 CFR §3.21 for recordal of this Assignment.

\_\_\_\_\_  
Alexander Streltsov, Inventor

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Date

\_\_\_\_\_  
Nicholas F. Borrelli, Inventor

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Date

\_\_\_\_\_  
Charlene M. Smith, Inventor

\_\_\_\_\_  
Date

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Witness

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Date

\_\_\_\_\_  
Joseph F. Schroeder III, Inventor

\_\_\_\_\_  
Date

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Witness

\_\_\_\_\_  
Date

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